

## REMARKS

Claims 1-13 and 15 are pending in the application. Claims 1 and 7 have been amended to more clearly set forth the invention, Claim 16 has been added, and Claims 6 and 14 have been canceled, leaving Claims 1-5, 7-13, 15, and 16 for consideration upon entry of the present Amendment.

No new matter has been introduced by these amendments. Reconsideration and allowance of the entire case is respectfully requested in view of the above amendments and the following remarks.

### Claim Rejections – 35 U.S.C. § 103

Claims 1-13 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,363,164 to Jones (hereinafter “Jones”) in view of U.S. Patent Application Publication 2204/0131230A1 to Paraskevakos (hereinafter “Paraskevakos”).

To establish a *prima facie* case of obviousness, it is known that three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference(s) must teach or suggest all the claim limitations. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d 1016, 1023 (Fed. Cir. 1996).

Claim 1, amended to include the limitation of canceled Claim 6, recites *inter alia*, during the generating of the image, automatically marking the areas of deviation that prompted the negative automatic decision regarding acceptance. Neither Jones nor Paraskevakos teach or suggest this limitation.

The method and system disclosed by Jones describes the invention as including means, such as a display, to indicate to the operator the reasons why a document has been rejected, e.g., *messages* such as “UV FAILURE” or “FLUORESCENCE FAILURE.” (Col. 40, lines 37-40.) Upon a bill failing one or more of the tests, an appropriate *error message* may be displayed such as “Suspect Document U- -“ for failure of the UV reflection test. (Col.

42, lines 52-59.) In the flowchart of Figure 26, if a thread is not present as determined at step 512, a *suspect code* may be issued at step 514. (Col. 46, lines 45-58.) An indication to the operator as to why a bill was flagged may be accomplished, for example, lighting an appropriate light, generating an appropriate sound, and/or displaying an *appropriate message in the display section* 1063 (Fig. 48). (Col. 65, lines 45-51.) In each case, a problem with the bill is merely communicated by messages or codes. Jones is silent as teaching or suggesting during the generating of the image, automatically marking the areas of deviation that prompted the negative automatic decision regarding acceptance as recited in Claim 1. Therefore, Jones does not teach every element of Claim 1.

The method and system disclosed by Paraskevagos describes typical operation of the system where money is received, is placed in the money input (8) so the serial numbers of the currency can be read, and the digitized numbers are stored in the memory of the CPU (3). (Page 3, Paragraphs [0043]-[0046].) The CPU (3) in communication with a local HUB SERVER (12) compares serial numbers for repeat numbers or numbers on a "list" of stolen or from illegal activity. A CPU (3) processes an image from the optical scanner (48) and compares the serial number from the scanner to the available serial numbers of memory (55). (Page 4, Paragraph [0062].) In each case, the scanning of the currency is done merely to further process the image to obtain the serial numbers for subsequent comparison. If something doesn't go right, like the number of the paper money is in a 'list' than a 'flag' (40) is raised and goes back to the start point (30), the system in a standby condition (30). (Page 3, paragraph [0059]-Page 4, paragraph [0060].) Nothing else happens to the image upon a negative decision by the system. That is, Paraskevagos is silent as teaching or suggesting during the generating of the image, automatically marking the areas of deviation that prompted the negative automatic decision regarding acceptance as recited in Claim 1. Therefore, Paraskevagos does not teach every element of Claim 1.

Jones and Paraskevagos do not teach or suggest all of the limitations of amended Claim 1. In addition, Paraskevagos does not cure the deficiencies of Jones. Thus, *prima facie* obviousness does not exist regarding amended Claim 1 with respect to the cited references.

Additionally, since the relied-upon references fail to teach or suggest all of the limitations of Claim 1, clearly, one of ordinary skill at the time of Applicant's invention

would not have had a reasonable likelihood of success in forming the claimed invention by the Examiner's proposed combination. Thus, here again, *prima facie* obviousness is unfounded. *Id.*

For this limitation of amended Claim 1, the Examiner alleges, that it is "well known in the art" that pattern recognition programs isolate specific areas within a document which encounter recognition problems and ask a user to manually identify the character. (See, Page 5, first full paragraph of the Office Action.) Applicant respectfully traverses the Examiner's assertion.

Official Notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. (MPEP 2144.03(A.)) While "official notice" may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 C.F.R. 1.113. *Id.* It would not be appropriate to take official notice of facts without citing prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known. *Id.* For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21 and MPEP 2144.03(A.).

The pertinent art as defined by the references' classifications is taken to be image analysis and more particularly, reading of paper currency. Applicant respectfully submits that no citation to a reference, recognized as the standard in image analysis, especially in the reading of paper currency, has been offered in the present office action to support the Examiner's assertion that during the generating of an image, the areas of deviation that prompted the negative automatic decision regarding acceptance are automatically marked, as recited in Claim 1. As discussed above, both Jones and Paraskevagos, pertaining to image analysis of paper money, are silent as to this limitation of amended Claim 1. In fact, the Examiner concedes that Jones does not teach automatically marking the area of deviation prompting the negative automatic decision during the generation of the image. (See, Page 5, first full paragraph of the Office Action.) Therefore, these two cited references do not establish a standard in image analysis, particularly in the reading of paper currency. Consequently, Examiner is respectfully requested to provide documentary evidence to support

the assertion that it is “well known in the art” that pattern recognition programs isolate specific areas within a document which encounter recognition problems and ask a user to manually identify the character, in the pertinent art of image analysis, particularly in the reading of paper currency.

Furthermore, since Jones and Paraskevagos relate to the pertinent art and do not teach or suggest, and in fact are silent to automatic marking the area of deviation prompting the negative automatic decision during the generation of the image, Applicant respectfully submits that Examiner’s assertion is not capable of *instant and unquestionable* demonstration as being well known. (MPEP 2144.03(A.)) Therefore, Applicant respectfully submits that it is not well known in the art of image analysis in the reading of paper currency, during the generating of the image, automatically marking the area of deviation prompting the negative automatic decision. Accordingly, the relevant obvious rejections of amended Claim 1 cannot be maintained.

In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor, or if not, then be reasonably pertinent to the particular problem with which the invention was concerned. (MPEP 2141.01(a).) While Patent Office classification of references are some evidence of “nonanalogy” or “analogy” respectively, the court has found “the similarities in differences in structure and function of the inventions carry far greater weight.” *In re Ellis*, 476 F.2d 1370, 1372, 177 USPQ 526, 527 (CCPA 1973).

Jones discloses a discrimination unit primarily used for authenticity. (Col. 2, lines 1-3.) This discrimination and authentication unit 14 authenticates the document and determines the denomination of the bill. (Col. 6, lines 11-15.) In Figure 13, a flow diagram of an exemplary discrimination unit, the microprocessor 212 initiates magnetic scanning, where data points obtained from the scanning are stored in RAM 226 and added together to yield a checksum. (Col. 29, line 64 – Col. 30, line 31.) The microprocessor determines the denomination of the bill and the checksum from the scanning is compared to an expected value for a genuine bill of the denomination identified. (*Id.*) If the checksum of the bill evaluated is within a predetermined range of the expected value, the bill is considered to be genuine. (Col. 30, lines 27-31.) Otherwise, the bill is considered to be counterfeit. (*Id.*)

In similar fashion, Paraskevagos discloses a method and system to recognize and validate currency based on the uniqueness of their numbers. (See, Abstract) The Paraskevagos system includes a scanner that creates an image that is later processed to recognizes the currency's denomination, screening the currency by denomination numbers and recognizing and storing digitally the serial numbers of the currency. (Page1, paragraph [0011].) These serial numbers are then used to primarily scan for counterfeit or 'black' listed money. (Page 2, paragraphs [0020-0024].) A typical operation of the system reads serial numbers and determines if they are valid through comparison with stored numbers. (Page 2, paragraphs [0043-0046].)

To the contrary of Jones and Paraskevagos, the present invention, particularly relates to a method and system that combines automated method of value determination and acceptability testing, with the possibility of visual inspection, at least in questionable cases. (See, Page 3, fourth paragraph of the Specification.) A further step of marking the areas that resulted in a negative automatic decision is used to support the visual inspection. (See, Page 4, fifth full paragraph of the Specification.) Reasons for marking include torn-off corners, nicked edges, washed-out areas of other objectionable features. (*Id*). That is, the functions of Jones and Paraskevagos and of Applicant's invention are vastly different. Therefore, the functions of Jones and Paraskevagos are non-analogous art and cannot be relied on as a basis for rejection of Applicant's invention. Accordingly, the relevant obvious rejections of amended Claim 1 cannot be maintained.

Jones and Paraskevagos, taken alone or in combination do not teach or suggest all of the limitation of amended Claim 1. As shown above, it is not evidenced that it is "well known in the art" that pattern recognition programs isolate specific areas within a document which encounter recognition problems and ask a user to manually identify the character, in the pertinent art of image analysis, particularly in the reading of paper currency. Moreover, Jones and Paraskevagos have different functions than that of the Applicant's invention, making the cited references non-analogous art that cannot be used as a basis for rejection of Applicant's invention. Accordingly, Claim 1 non-obvious over the cited references. Claim 1 is not further objected or rejected and is thus allowable. Claims 2-5 are also rejected as being obvious. However, these claims variously depend from allowable Claim 1 and are thus

correspondingly allowable. Reconsideration and withdrawal of the non-obvious rejection of Claims 1-5 is thus respectfully requested.

Claims 7-13 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over Jones in view of Paraskevagos.

Claim 7, as amended, recites *inter alia*, a means for automatically marking the areas of deviation or the deviation of authenticity parameters in said generated image that prompted the negative automatic decision regarding acceptance during generation of the image.

In Jones and Paraskevagos, as discussed above, there is no disclosure, teaching, or suggestion during generating of the image, automatically marking the areas of deviation that prompted the negative automatic decision regarding acceptance, as recited in amended Claim 7. Since the relied-upon references, taken alone or in combination, fail to teach or suggest all of the limitations of Claim 7, one of ordinary skill at the time of Applicant's invention would not have had a reasonable likelihood of success in forming the claimed invention by the Examiner's proposed combination. Thus, *prima facie* obviousness does not exist regarding amended Claim 7 with respect to Jones and Paraskevagos.

As shown above, it is not evidenced that it is "well known in the art" that pattern recognition programs isolate specific areas within a document which encounter recognition problems and ask a user to manually identify the character, in the pertinent art of image analysis, particularly in the reading of paper currency. Moreover, Jones and Paraskevagos have different functions than that of the Applicant's invention, making the cited references non-analogous art that cannot be used as a basis for rejection of Applicant's invention. Accordingly, Claim 7 is non-obvious over the cited references. Claim 7 is not further objected or rejected and is thus allowable. Claims 8-13 are also rejected as being obvious. However, these claims variously depend from allowable Claim 7 and are thus correspondingly allowable. Reconsideration and withdrawal of the non-obvious rejection of Claims 7-13 is thus respectfully requested.

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jones in view of Paraskevagos.

Claim 15 recites, *inter alia*, digitization unit for at least partially digitizing the bank note to create digitized data.

Jones teaches a full image scanner 12, scanning the *full* image of the document, recognizes certain fields within the document and processes information contained within these fields. (Col. 5, lines 64-67.) For example, the full image scanner 12 may search for the serial number when processing. (Col. 6, lines 1-2.) The general operation of the system, as illustrated in Figure 2, the *full* image scanner scans a *full* image of the document, then selected parts of the image are processed. (Col. 15, lines 42-48.) That is, there is no option to scan only a part of the document, but the entire document is required to be scanned, then information is obtained from the scanned document. Therefore, Jones does not teach or disclose a digitization unit for at least partially digitizing the bank note to create digitized data as recited in Claim 15.

Paraskevagos teaches “scanners” for transferring pictures and images, where the scanner can recognize the currency’s denomination. (Page 1, paragraph [0011].) As soon as the currency passes under the scanner (32), the reading of the currency (33) occurs. (Page 3-4 paragraph [0059].) When the reading is over (34), the number is compared to that in memory (35). (*Id.*) That is, there is no option to scan only a part of the document, but the entire document is required to be scanned, then information is obtained from the scanned document. Therefore, Paraskevagos does not teach or disclose a digitization unit for at least partially digitizing the bank note to create digitized data as recited in Claim 15.

Jones and Paraskevagos do not teach or suggest all of the limitations of Claim 15. As such, Paraskevagos does not cure the deficiencies of Jones. Thus, *prima facie* obviousness does not exist regarding Claim 15 with respect to the cited references.

Additionally, since the relied-upon references fail to teach or suggest all of the limitations of Claim 1, clearly, one of ordinary skill at the time of Applicant’s invention would not have had a reasonable likelihood of success in forming the claimed invention by the Examiner’s proposed combination. Thus, here again, *prima facie* obviousness is unfounded. *Id.*

All of the objections and rejections are herein overcome. No new matter is added by way of the present Amendments and Remarks, as support is found throughout the original filed specification, claims and drawings. The application is now allowable to Applicants. Prompt issuance of Notice of Allowance is requested.

The Examiner is invited to contact Applicants' attorney at the below listed phone number regarding this response or otherwise concerning the present application.

Applicants hereby petition for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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